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Dining on Campus: Plant-based Food Offerings at UVM

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Introduction

University of Vermont’s students today are earth and health-conscious, with 42% of students choosing UVM because of the institution’s commitment to these values. Often these values translate to the food choices students make. Working closely with students, UVM Dining has shifted food offerings to meet increasing requests for plant-based food options in the dining halls. More vegetarian and vegan options are now available to students at all meals; however, little empirical data has been collected to date. In response to student demand for more plant-based food options, this study gathers baseline data on the percentage of vegetarian and vegan meal options available at unlimited dining halls on campus. This data will provide students, UVM administrators and Sodexo leadership and chefs a clearer picture of the current plant-based food offerings in order to understand growth opportunities.

Definitions: Vegan, Vegetarian, Omnivorous

What constitutes a “meal” is difficult to define. For some, a tortilla with hot sauce may constitute a meal, while for others a plate that does not contain a meat, starch, and greens is not a full meal. Therefore, it is difficult to assess the number of meal options available to students, as each individual has a unique definition of “meal”. There are also difficulties in defining what is vegetarian and vegan as there are a range of allowances within each dietary preference to which individuals may subscribe. Vegan can be defined as “strict vegetarianism”, meaning no animal by-products at all, including products such as cane sugar, which is sometimes filtered through animal bone char. Even within the realm of veganism there are gradations: some vegans will consume only plant-based whole foods, but others allow highly processed snack foods, such as Doritos or Oreos, as these are technically produced without animal products. Vegetarians can be classified as lacto-vegetarian (consumes milk), ovo-vegetarian (consumes eggs), or lacto-ovo-vegetarian (consumes both egg and dairy).

For the purposes of this inquiry, we consider *vegan* to mean a diet that does not include animal products or byproducts, including refined sugars that may be processed using bone char from animals. Organic sugar, however, is not processed with bone char and is considered vegan. After consulting with UVM Dining’s Registered Dietitian, who reported that some vegans are not strict regarding

intake of refined sugars, we included a “vegan with sugar” category that includes vegan items containing refined sugars.

We define *vegetarian* as a diet that does not include meat but does include egg

Table 1. Descriptions of Dietary Preferences

Dietary Preference	Description
Vegan	No animal products or by products; no products with non-organic refined sugar
Vegan with sugar	No animal products or by products
Vegetarian	No meat products; does include eggs and dairy
Omnivorous	Includes all food options

and milk products. We exclude vegetarian foods that are fried in oil, such as french fries, from the vegetarian category as the oil can also be used to fry meat products.

Omnivorous is defined as a diet which includes all offerings, including animal products and byproducts.

Methods

With a goal of triangulating findings, plant-based food options were assessed with three different methods. To ensure that these numbers created an accurate representation of vegan and vegetarian options on campus, we used each method to verify the other two methods. First, we calculated the percentage of plant-based food purchased by all chefs on campus using “Real Food” purchasing data. Second, we assessed the number of plant-based food options on daily menus provided by chefs at three unlimited dining halls on campus: Central Campus Dining Hall, Redstone Simpson and Harris Millis. Third, we performed in-person meal audits at the same three unlimited dining halls, counting and categorizing plant-based food options. Each method has strengths and weaknesses, but together they paint a clearer picture of plant-based food offerings on campus.

In 2019, Sodexo Fellow Devon Wright used Real Food purchasing data to assess the percentage of plant-based ingredients in Dining across campus, including retail and resident dining. The rigorous definition used to categorize offerings was provided by AASHE/STARS and did not include highly processed foods, unless that food was a meat alternative, such as Beyond or Impossible meat (Appendix A). This data was collected in July 2018, October 2018 and February 2019 for all units across campus. Wright’s findings were used in combination with this study’s findings to corroborate menu and audit data.

UVM chefs use an online software program, Retail Ranger, to build menus for dining halls. From these menus, chefs print food signage that provides details about food allergies and preferences, including whether a food option is vegan or vegetarian. Using these labels we counted the number of vegan, vegetarian, and omnivorous food options at 3 unlimited dining halls on campus: Redstone Simpson, Central Campus Dining Hall and Harris Millis.¹ We analyzed 8 weeks of menu data (4 weeks in Fall 2019, and 4 weeks in Spring 2020), assessing breakfast, lunch and dinner meals for Monday through Friday, for a total of 360 meals. We excluded weekends from the analysis to maintain consistency in data collection, as they had not been included in the in-person audit that was wrapping up as this data began to be collected. For this data collection we counted plant-based options without assessing each food item individually, resulting in french fries being categorized as vegan. For an example of a menu, see Appendix B.

The third method we employed to assess the number of vegan, vegetarian, and omnivorous options was in-person audits of meals at three unlimited dining halls on the UVM

¹ We were unable to include the “vegan with sugar” category as the ingredient lists for food items were not available in Retail Ranger. In this software, vegan items containing sugar are automatically categorized as vegetarian.

campus (Redstone Simpson, Central Campus Dining Hall and Harris Millis), categorizing and tallying each food item offered. Prepared food options were categorized by dining hall signage specifying that the item was vegan or vegetarian. In addition, food ingredient lists were used to discover the inclusion of sugar. Often, we asked chefs to clarify ingredients (e.g. is there sugar or dairy in the tortillas?), particularly when labels were absent or unclear. Pre-packaged foods were assessed using food ingredient labels (e.g. bread products). Food items were continually added to a spreadsheet that was referenced during audits, greatly impacting efficiency (Appendix C). Each dining hall offers breakfast, lunch, and dinner, with Harris Millis offering an additional meal: late-night dinner. To exercise consistency across dining halls, we excluded the late-night meal. Based on the researcher’s scheduling, our goal was to obtain 6 audits of each meal (breakfast, lunch and dinner) at each unlimited dining hall, for a total of 54 audits. However, due to restrictions around COVID-19 in Spring 2020, the total number of audits obtained was 39 (Table 2).

Table 2. Number of Meal Audits

Meal Type	Central	Redstone	Harris Millis	Total
Breakfast	7	4	5	16
Lunch	5	3	5	13
Dinner	4	3	3	10
Total	16	10	13	39

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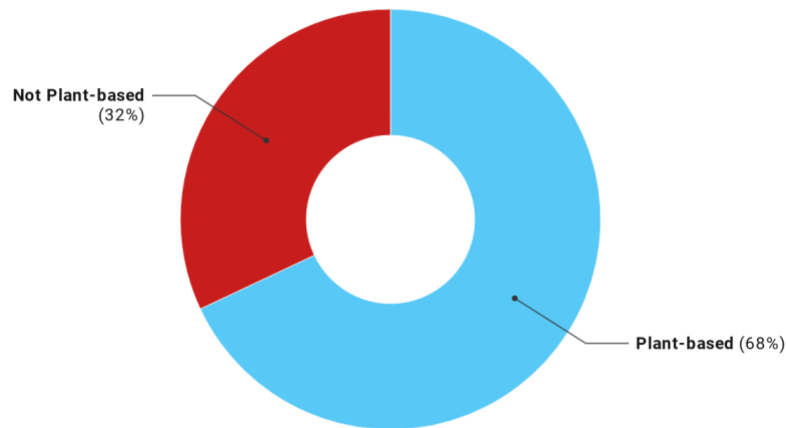
Of note, the labeling software had been recently updated and staff were going through a period of adjustment and troubleshooting. Occasionally food options appeared mislabeled, and kitchen staff obligingly pulled out recipes to determine ingredients. This most often happened when a food option contained sugar, which would place it in the vegetarian category even if all other ingredients were vegan. Some chefs reported the use of agave or maple syrup in recipes to maintain the food option as vegan. Mislabeled food options were always labeled more conservatively, so that some items labeled vegetarian were actually vegan. This may reduce the number of perceived available vegan food options but would not result in an individual eating outside their food preference. Students in the dining halls are strongly encouraged to clarify food options if they have any questions regarding its ingredients.

Results

AASHE/STARS Data

UVM Dining has received a gold rating from AASHE/STARS, the Sustainability Tracking, Assessment, and Rating System, and is in the top 12% of all rated institutions for sustainability. The STARS rating is designed to allow institutions to track initiatives for sustainability over time using 68 sustainability measurements in four categories: Academics, Engagement, Operations, and Planning and Administration. Prior to this investigation we assessed the number of vegetarian and vegan food options available to students based on the number of “plant-based” foods purchased from suppliers, finding that 32% of the foods purchased fit this strict definition (excludes processed foods) and 68% vegetarian and omnivorous (Figure 1). This finding aligns with data collected during the 2019-2020 school year, outlined below.

Plant-based Real Food Purchasing



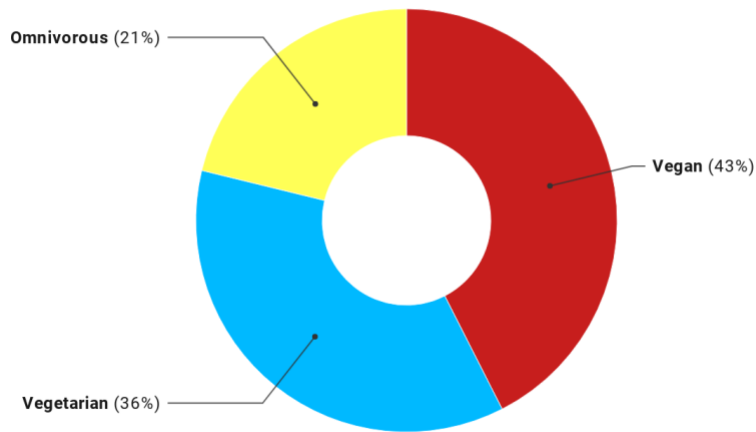
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Figure 1. Percentage of plant-based food purchased by UVM Dining, 2018-2019.

Menu Analysis

Analysis of menu data for 360 meals at the three unlimited dining halls found, on average, 43% vegan options, 36% vegetarian options, and 21% meat (omnivorous) options (Figure 2, next page). Vegan and vegetarian items sum to 78.8% of the menu items available.

Average Percentage by Category



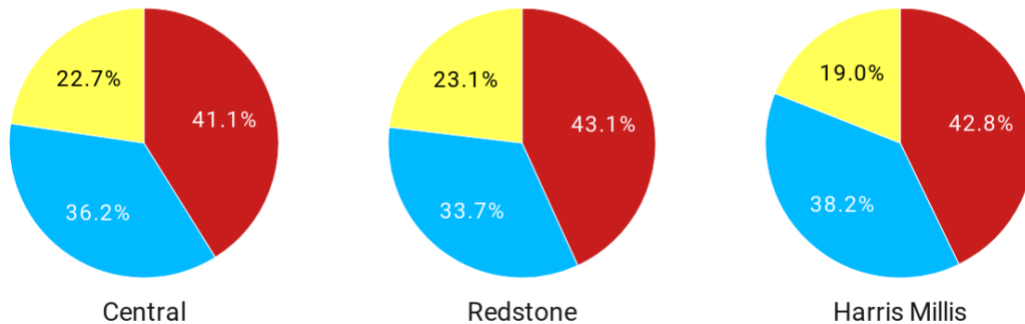
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Figure 2. Average percentage of food options for vegan, vegetarian, and meat (omnivorous) for three dining halls over 8 weeks in fall and spring semesters (2019-2020). N=360

Breaking down the findings by dining hall shows slight variation in the percentage of food options available. Vegan options averaged from 41% to 43%, vegetarian options averaged from 34% to 38%, and meat-containing options (omnivorous) averaged from 19% to 23% (Figure 3).

Percentages by Dining Hall

■ Vegan ■ Vegetarian ■ Omnivorous

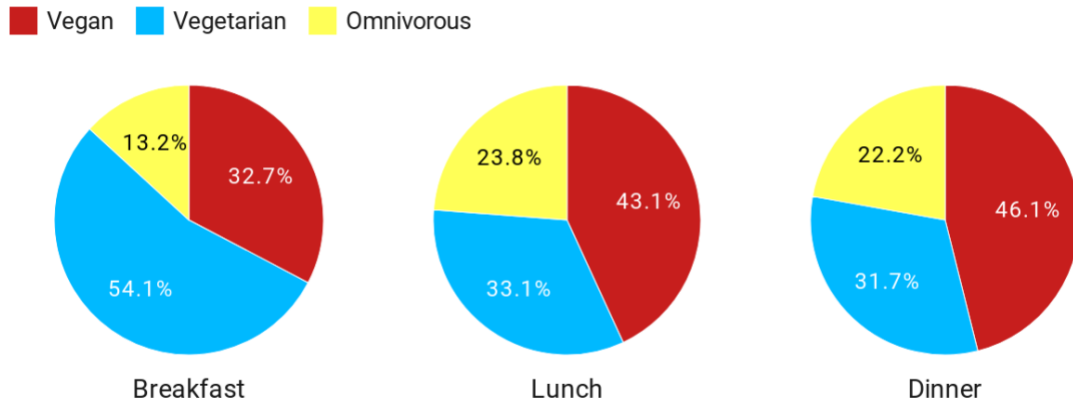


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Figure 3. Percentage of food options available by dining hall, averaged over 8 weeks in spring and fall semesters (2019-2020). N=360

Food options varied more by meal type, particularly for breakfast, which had a greater percentage of vegetarian options (Figure 4). Breakfast averaged 33% vegan options, while lunch and dinner averaged 43% and 46%, respectively. On average, meat options were lower at breakfast (13%) than lunch (24%) and dinner (22%).

Percentages by Meal Type

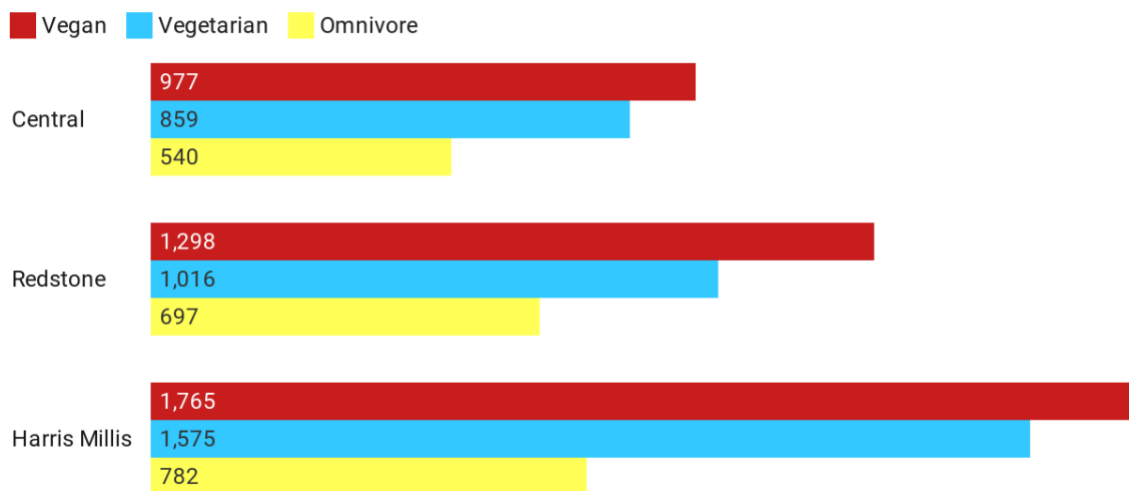


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Figure 4. Percentage of food options for all dining halls by meal type. N=360

The total number of food items available on menus varied by dining location, with the greatest number of items at Harris Millis and the lowest at Central (Figure 5). This finding could reflect the amount of food available at each dining hall, but could also be due to differences in how the menu software is used by chefs at each dining hall.

Total Number of Food Items by Dining Hall



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Figure 5. Total number of menu food items counted by dining hall. N=360

Dining Hall Audits

Overall, 42.2% of the food options at the three unlimited dining halls were vegan, 22.9% were vegan with sugar, 28.6% were vegetarian, and 6.3% were omnivorous. Cumulatively, 93.7% of food options were vegan/vegetarian (Table 3). The percentage of omnivorous food options is smaller than the AASHE/STARS and Retail Ranger menu audit likely due to the way that foods are counted. For example, an in-person audit of a salad bar would result in a high number of vegan and vegetarian options, as each salad topping counts as one food item (green peppers, tomatoes, cucumbers, feta cheese, etc) relative to meat options (usually only one or two food items, if at all). The Retail Ranger menu rarely includes this detailed information, typically not even including the salad bar at all on the menu. In addition, meat options are usually offered as a part of a dish (e.g. Old Fashioned Turkey Pot Pie), instead of an ingredient of a dish; therefore, as a percentage of all options available, omnivorous options are a smaller percentage.

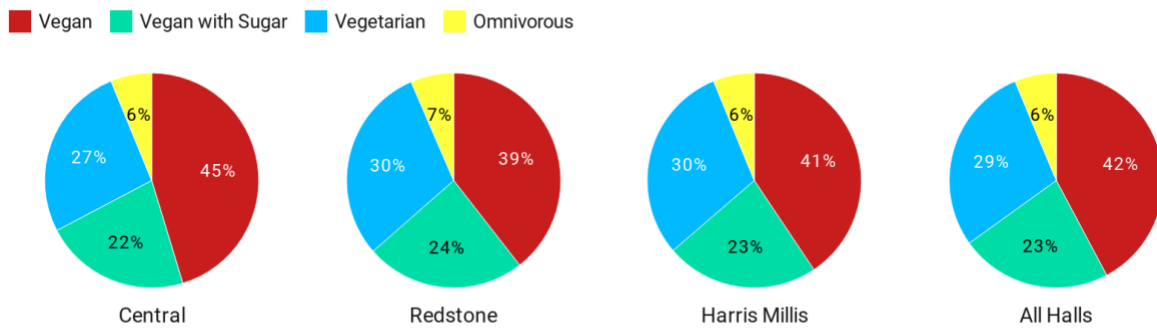
Table 3. Percentages for Food Categories by Dining Hall

	Vegan	Vegan with Sugar	Vegetarian	Omnivorous
Central	45.3%	22.0%	26.5%	6.2%
Redstone	39.4%	24.1%	29.9%	6.5%
Harris Millis	40.6%	23.1%	30.1%	6.2%
All Halls	42.2%	22.9%	28.6%	6.3%
All Halls, Cumulative Percent	42.2%	65.2%	93.7%	100.0%

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The percentage of food for each category did not vary greatly between dining halls, with six percentage points being the greatest difference (Figure 6, next page). Central provided the highest percentage of Vegan options (45%), with Redstone providing the lowest (39%). The percentage of meat options (Omnivorous) was 6.2% at Central and Harris Millis, and 6.5% at Redstone. All three dining halls offered 94% Vegan/Vegetarian options overall.

Percentages by Dining Hall

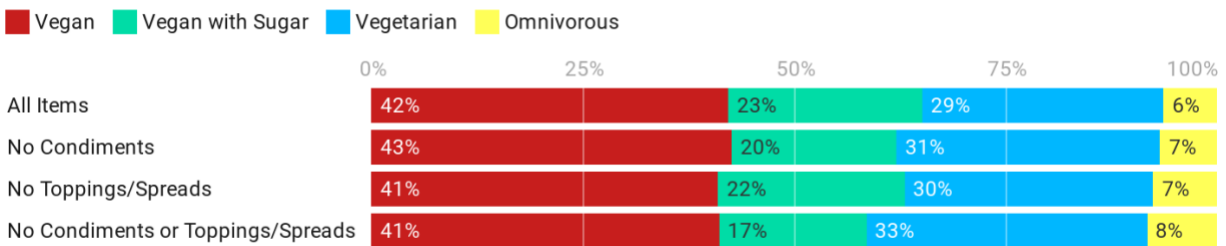


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Figure 6. Percentages for food categories by dining hall.

Removing condiments and toppings/spreads from the analysis had little impact on the percentages in each food category, with a shift of only 1-3% within all categories (see Figure 7). The percentage of vegan options decreased from 42% to 41%, the percentage of vegetarian options increased from 29% to 33%, and the percentage of meat-containing options (omnivorous) increased from 6% to 8%.

Plant-based Percentages



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Figure 7. Percentages within food categories with data for condiments and topping.

Note. Not all categories sum to 100% due to rounding.

Study Limitations

One limitation of this study is the number of audits performed. For the in-person meal audit data to be considered scientific and held to the highest standard, we would need to audit each meal type (breakfast, lunch, dinner) at each dining hall 264 times, for a total of 22,176 audits. Another limitation is the difficulty in equating meal options. A turkey wrap is one item, as is lettuce for a salad, or a cookie. Again, without strictly defining what constitutes a “meal”, it is difficult to design a data collection that can exactly capture meal options. However, through assessing plant-based options using three different methods, we believe that our findings are able

to more clearly describe the current availability of plant-based options at the three unlimited dining halls.

Conclusion

The goal of this data collection was to provide stakeholders with empirical data on plant-based food options available to students in the dining halls. With these findings, UVM and UVM Dining administrators and leadership can determine if vegan and vegetarian options should continue to be tracked for year over year data, understanding that this information takes a considerable amount of time to collect. Furthermore, leadership can use this information to drive purchasing shifts, should the decision be made to include more plant-based options on campus. Most importantly, these findings can be shared with students and student groups, providing a catalyst for collaboration around improving or adjusting food options on campus.

Appendix A: AASHE/STARS Real Food Challenge Definition of Plant-based Foods

Consistent with Menus of Change, plant-based foods are defined as “fruits and vegetables (produce); whole grains; beans, other legumes (pulses), and soy foods; nuts and seeds; plant oils; and herbs and spices”, simple combinations of these foods and their derivatives, and vegetarian/vegan alternatives to meat and dairy:

<p>Unprocessed or minimally processed:</p> <ul style="list-style-type: none"> ● Fruits ● Vegetables ● Whole grains ● Legumes ● Mushrooms ● Nuts ● Seeds ● Herbs ● Spices <p>This includes:</p> <ul style="list-style-type: none"> ● Cereal grains and flours ● Plain oatmeal, pasta, and noodles ● Fruit or vegetable juices ● Tea ● Coffee 	<p>Processed culinary ingredients derived from plants or nature, for example:</p> <ul style="list-style-type: none"> ● Vegetable oils crushed from seeds, nuts, or fruits such as olives ● Starches extracted from corn and other plants ● Sugar and sweeteners obtained from plants ● Honey extracted from combs and syrup from maple trees ● Soy sauce ● Vinegar 	<p>Simple processed foods composed primarily of unprocessed or minimally processed plant-based foods and plant-based culinary ingredients, for example:</p> <ul style="list-style-type: none"> ● Canned or bottled vegetables, fruits, and legumes ● Tomato extract, pastes, or concentrates ● Salted or sugared nuts and seeds ● Fruits in syrup ● Unpackaged freshly made breads ● Cereal products such as flavored oatmeal ● Tofu and tempeh ● Fermented alcoholic beverages such as wine, beer, and cider 	<p>Vegetarian/vegan alternatives to meat and dairy, for example:</p> <ul style="list-style-type: none"> ● Plant-based ‘milks’ ● Plant-based meat substitutes ● Plant-based margarines and spreads
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Animal products (i.e., meat, poultry, fish, seafood, eggs, and dairy) and their derivatives, drinking water, and most ultra-processed foods do NOT qualify as plant-based foods. Examples of ultra-processed foods include:

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> ● Sweet or savory packaged snacks ● Chocolate and candies (confectionary) ● Mass produced packaged breads and buns ● Cookies (biscuits), pastries, cakes, and cake mixes | <ul style="list-style-type: none"> ● Instant sauces ● Many ready to heat products including pre-prepared pies and pasta and pizza dishes ● Powdered and packaged ‘instant’ soups, noodles and desserts | <ul style="list-style-type: none"> ● Carbonated drinks ● ‘Energy’ drinks ● ‘Fruit’ drinks ● Distilled alcoholic beverages such as whiskey, gin, rum, and vodka |
|---|---|--|

Appendix B: Lunch Menu, Central Dining Hall, Feb 11, 2020

TUESDAY	WEEK OF MONDAY FEBRUARY 10	
	DAILY SPECIAL	French Fries, Small
		Roast Beef and Caramelized Onion Wrap
		Miso Cured Tofu
		Jasmine Rice with Scallions
		Curried Ginger Vegetable Stir Fry
		Asian Vegetable Stir Fry
		General Tso Chicken
		Sesame Bok Choy
		Hamburger
		Grilled Cheese Sandwich
		Monterey Black Bean Burger
		Chicken Sandwich
		Potato Chorizo Quesadilla
		Green Peas
		White Rice
		Tomato Basil Marinara
		Penne Pasta
		Tempeh Butternut Squash Noodle Bake
		Pepperoni Pizza
		16" Cheese Pizza
		Moroccan Spiced Roasted Vegetables
		Turmeric Basmati Pilaf
		Southwest Flank Steak
		Black Bean, Corn and Cilantro Salad
		Turkish Beans (Zeytinyagli Barbunya)
		House Fried Tortilla Chips

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SOUPS

Tue
 Chunky Vegetable Orzo Soup VG

THIS WEEK'S EVENTS

Have a Great Week!

CAFE HOURS

All Day Everyday!

MANAGERS

Susan Cathrall

VG Vegan
 V Vegetarian
 Wellness

***NOTE:** Before placing your order, please inform your server if you have a food allergy

Appendix C: Meal Audit: food item categories

V= Vegetarian

VG = Vegan

VGS = Vegan with Sugar

Condiments

ABC Sweet Soy Sauce	VGS
Al's	VG
BBQ Sauce	VGS
Brown sugar	VGS
Chef Myron's Ponzu	VGS
Chef Myron's Szechwan	VGS
Cholula hot sauce	VG
Franks Red Hot Sauce	VG
Garlic granules	VG
Heinz Honey Mustard	V
Heinz Ranch	V
Heinz Sweet Relish	V
Hershey's Syrup	VGS
Hoisan Sauce	VGS
Honey	V
Ketchup	VGS
Mae Ploy Chili Sauce	VGS
Malt Vinegar	VG
Maple syrup	VG
Mayonnaise	V
Mustard, Dijon	VGS
Mustard, Yellow	VG
Oils	VG
Oregano	VG
Parmesan	V
Red Boat Fish Sauce	O
Red Pepper Flakes	VG
Reddi Whip	V
Salad Dressing, Charred Tomato	VG
Salad Dressing, Chipotle Ranch	VG
Salad Dressing, Ginger Sesame	VG
Salad Dressing, HV 1000 Island	V
Salad Dressing, HV blue cheese	V
Salad Dressing, HV Caesar	V
Salad Dressing, HV Honey Mustard	V

Salad Dressing, HV Italian	VGS
Salad Dressing, HV Oil & balsamic lite	VGS
Salad Dressing, HV Ranch	V
Salad Dressing, Lemon Basil	VGS
Salad Dressing, Maple Balsamic	VG
Salad Dressing, NO Balsamic	VGS
Salad Dressing, Ranch	VG
Salad Dressing, Sherry Vinegarette	VGS
Salad Dressings	V/VG/VGS
Soy Sauce	VG
Sriracha	VGS
Sweetener, Blue - Equal	VGS
Sweetener, Natural Sugar	VGS
Sweetener, Pink - Sweet N'Low	VG
Sweetener, yellow - Splenda	VGS
Tabasco, chipotle	VGS
Tabasco, green	VG
Tabasco, red	VG

Toppings/Spreads

Apple, dried and chopped	VG
Apricots, dried and chopped	VG
Banana chips	VGS
Butter	V
Butterscotch chips	V
Candied nuts	VGS
Chia seeds	VG
Chocolate Chips	V
Chocolate chips, white	VGS
Chow Mein Noodles	VGS
Coconut, shredded	VGS
Craisins	VGS
Cream cheese	V
Croutons	V
Earth Balance Vegan Butter	VG

Flax seeds	VG
Guacamole	VG
Hummus	VG
Jelly, Apple	VG
Jelly, Grape	VG
Jelly, Mixed berry	VG
Jelly, Strawberry Preserves	VGS
Margarine	V
Nutella	V
Nuts	VG
Olives	VG
Peanut butter	VGS
Pepitas (pumpkin seeds)	VG
Pickled jalapeno	VG
Pickled, pepperoncini	VG
Pickles	VG
Pickles, bread and butter	VGS
Pickles, gherkin	VG
Raisins	VG
Relish	VGS
Salsa	VG
Sour cream	V
Sun butter	VGS/VG
Sunflower seeds	VG
Tofutti	VG
Tzatziki	V
Walnuts	VG

Packaged/Processed

Bagels in deli	VGS
Block & Barrel European Wheatberry Bread	VGS
Brown Rice Pasta	VG
Cereal, apple jacks	VGS
Cereal, Cheerios	VGS
Cereal, Chocolate Chex	VGS
Cereal, Chocolate Krave	V
Cereal, Cinnamon Toast Crunch	VGS
Cereal, Cocoa Krispies	VGS

Cereal, Corn Flakes	VGS
Cereal, Corn Pops	VGS
Cereal, Crispix	VGS
Cereal, Frosted Flakes	VGS
Cereal, Frosted Mini Wheats	VGS
Cereal, Fruit Loops	VGS
Cereal, Golden Grahams	VGS
Cereal, Honey Nut Cheerios	VGS
Cereal, Lucky Charms	VGS
Cereal, Raisin Bran	VGS
Cereal, Rice Crispies	VGS
Cereal, Special K with red berries	VGS
Cereal, Trix	VGS
Crunch Master Multi-grain Crackers	VGS
Granola, Fruit & Maple	VGS
Hamburger buns, "vegan"	VGS
Hot dog buns	VGS
Ice Cream Cone	VGS
Kinnikinnick Cinnamon Sugar Donut	V
Kinnikinnick Maple Glazed Donut, Gluten Free	V
Koffee Cup English Muffin	VGS
Lucy's Chocolate Chip Cookies	VGS
Lucy's Cookies	VG
Oyster Crackers	VG
Safe and Fair Granola	VGS
Schar Gluten Free Hamburger Bun	VGS
Schar Gluten Free White Bread	V
Silk Yogurt	VGS
Sysco Wheat Bread	VGS
Sysco White Bread	VGS
Thomas Honey Wheat English Muffin	V

Thomas Whole Wheat English Muffin	V
Tortillas, Brown Rice	V
Tortillas, flavored	VGS
Tortillas, plain	VG
Udi's cinnamon Bagel	V
Udi's Cinnamon Raisin Bread	V
Udi's Double Chocolate Muffins	V
Udi's Gluten Free Blueberry Muffin	V
Udi's Gluten Free Plain Tortilla	V
Udi's Hamburger Bun	V
Udi's Hotdog Bun	V
Udi's Lemon Streusel Muffin	V
Udi's Multigrain Bread	V
Udi's Plain Bagel	V
Udi's White Bread	V
Van's Gluten Free Waffle	VG
VBC 10 Grain Bread	V
VBC Cinnamon Raisin Bread	V
VBC English Muffin	VGS
VBC Organic Multi-grain	VG
VBC Organic Soft Honey Cracked Wheat	V
VBC Organic Soft Oatmeal	VG
VBC Organic Soft Wheat	VG
VBC Organic Soft White	VG
VBC Rye	VG
VBC Wheat Bread	VGS

Appendix D: Menu Analysis: totals from all dining halls for all meals, by date

Date	Vegan	Vegetarian	Omnivorous	Total	Percent Vegan	Percent Vegetarian	Percent Omnivorous
09-09	113	93	53	259	44%	36%	20%
09-10	110	103	53	266	41%	39%	20%
09-11	108	96	50	254	43%	38%	20%
09-12	105	104	47	256	41%	41%	18%
09-13	114	102	51	267	43%	38%	19%
Total: Week 1	550	498	254	1,302	42%	38%	20%
09-16	113	91	55	259	44%	35%	21%
09-17	109	100	55	264	41%	38%	21%
09-18	114	87	56	257	44%	34%	22%
09-19	115	93	53	261	44%	36%	20%
09-20	109	96	51	256	43%	38%	20%
Total: Week 2	560	467	270	1,297	43%	36%	21%
9-30	106	94	49	249	43%	38%	20%
10-1	108	98	54	260	42%	38%	21%
10-2	106	89	55	250	42%	36%	22%
10-3	106	100	53	259	41%	39%	20%
10-4	106	99	51	256	41%	39%	20%
Total: Week 3	532	480	262	1,274	42%	38%	21%

11-11	114	92	52	258	44%	36%	20%
11-12	104	108	53	265	39%	41%	20%
11-13	115	92	56	263	44%	35%	21%
11-14	113	96	56	265	43%	36%	21%
11-15	107	90	63	260	41%	35%	24%
Total: Week 4	553	478	280	1,311	42%	36%	21%
Total: Fall Semester	2195	1923	1066	5,184	42%	37%	21%

Date	Vegan	Vegetarian	Omnivorous	Total	Percent Vegan	Percent Vegetarian	Percent Omnivorous
02-24	83	64	40	187	44%	34%	21%
02-25	78	75	50	203	38%	37%	25%
02-26	81	62	53	196	41%	32%	27%
02-27	87	67	50	204	43%	33%	25%
02-28	82	66	46	194	42%	34%	24%
Total: Week 5	411	334	239	984	42%	34%	24%
03-02	79	57	50	186	42%	31%	27%
03-03	76	71	39	186	41%	38%	21%
03-04	70	65	48	183	38%	36%	26%
03-05	77	70	45	192	40%	36%	23%
03-06	74	72	43	189	39%	38%	23%
Total: Week 6	376	335	225	936	40%	36%	24%
02-10	124	85	52	261	48%	33%	20%
02-11	102	79	43	224	46%	35%	19%

02-12	99	81	49	229	43%	35%	21%
02-13	112	89	49	250	45%	36%	20%
02-14	115	92	48	255	45%	36%	19%
Total: Week 7	552	426	241	1,219	45%	35%	20%
02-17	109	87	53	249	44%	35%	21%
02-18	113	96	46	255	44%	38%	18%
02-19	83	60	50	193	43%	31%	26%
02-20	92	90	51	233	39%	39%	22%
02-21	109	99	48	256	43%	39%	19%
Total: Week 8	506	432	248	1,186	43%	36%	21%
Total: Spring Semester	1845	1527	953	4325	43%	35%	22%

Date	Vegan	Vegetarian	Omnivorous	Total	Percent Vegan	Percent Vegetarian	Percent Omnivorous
Total: Fall & Spring	4040	3450	2019	9509	42.5%	36.3%	21.2%

Appendix E: Example of an in-person meal audit, Harris Millis, Nov 19, 2019 (Lunch)

Food Station/Category	Vegan	Vegan with Sugar	Vegetarian	Omnivorous	Totals
Condiments	15	10	9	1	35
Toppings/Spreads	10	5	5	0	20
Fruit	4	0	0	0	4
Waffle/Salad/Desserts	15	3	10	1	29
Mansfield Grill	2	0	3	2	7
Simple Servings	2	1	0	1	4
Fresh Hearth	4	0	4	2	10
Pea Pod	3	3	4	4	14
Ice Cream/Cereal	1	5	5	0	11
My Zone	10	3	12	1	26
Total	66	30	52	12	160
Percent	41.3%	18.8%	32.5%	7.5%	
Cumulative percent	41.3%	60.0%	92.5%	100.0%	
Total, excluding condiments	51	20	43	11	125
Percent, excluding condiments	40.8%	16.0%	34.4%	8.8%	
Cumulative percent		56.8%	91.2%	100.0%	
Total, excluding toppings/spreads	56	25	47	12	140
Percent, excluding toppings/spreads	40.0%	17.9%	33.6%	8.6%	
Cumulative percent		57.9%	91.4%	100.0%	
Total, excluding condiments and toppings/spreads	41	15	38	11	105
Percent, excluding condiments and toppings/spreads	39.0%	14.3%	36.2%	10.5%	
Cumulative percent	39.0%	53.3%	89.5%	100.0%	

Appendix F: Meal Audit: combined meal totals (breakfast, lunch, dinner) for all audits

		Vegan	Vegan with Sugar	Vegetarian	Omnivorous	Totals
All food items						
	Central	962	468	563	132	2,125
	Redstone	508	311	386	84	1,289
	Harris Millis	693	395	514	105	1,707
	All Halls	2,163	1,174	1,463	321	5,121
Totals without condiments						
	Central	785	303	526	112	1726
	Redstone	411	217	335	74	1037
	Harris Millis	565	286	432	92	1375
	All Halls	1761	806	1293	278	4138
Totals without toppings/spreads						
	Central	747	368	483	131	1729
	Redstone	436	259	336	84	1115
	Harris Millis	572	314	445	103	1434
	All Halls	1755	941	1264	318	4278
Totals without condiments and toppings/spreads						
	Central	570	203	446	111	1330
	Redstone	339	165	285	74	863
	Harris Millis	444	205	363	90	1102
	All Halls	1353	573	1094	275	3295